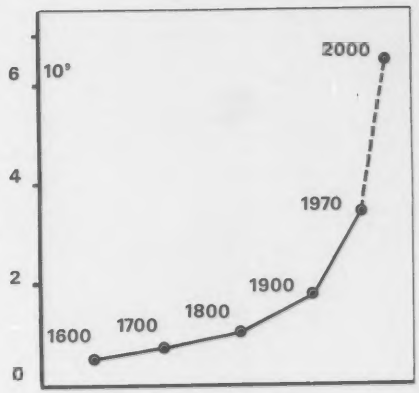
Vol. 32 1985
July - December
ISSN 0010-7824

CONTRACEPTION

AN INTERNATIONAL JOURNAL



DANIEL R. MISHELL, Jr., M.D.—Editor

Publisher: GERON-X, INC., LOS ALTOS, CALIF.

EDITOR
Daniel R. Mishell, Jr., M.D.
Dept. of Obstetrics and Gynecology
University of Southern California School of Medicine
1240 North Mission Road
Los Angeles, California 90033

EDITORIAL ASSISTANTS
Alberta Lawson
Janis H. Torres

BOARD OF ASSOCIATE EDITORS

C. Wayne Bardin, M.D.
Director, Center for Biomedical Research
The Population Council
1230 York Avenue
New York, New York 10021

Gerald S. Bernstein, Ph.D., M.D.
Professor
Department of Obstetrics and Gynecology
USC School of Medicine
Los Angeles, California 90033

Joseph W. Goldzieher, M.D.
Professor and Director
Endocrine/Metabolic Research
Department of Obstetrics and Gynecology
Baylor College of Medicine
St. Luke's Episcopal Hospital
Houston, Texas 77030

Peter F. Hall, M.D., Ph.D.
Principal Scientist
Worcester Foundation for Experimental Biology
Shrewsbury, Massachusetts 01545

Roy Hertz, M.D., Ph.D.
Research Professor
Departments of Pharmacology and Obstetrics and Gynecology
George Washington University Medical Center
Washington, D.C. 20037

Susan Heyner, Ph.D.
Director, Obstetrics & Gynecology Research Laboratory
303 Korman Research Building
Albert Einstein Medical Center
York and Tabor Roads
Philadelphia, Pennsylvania 19141

William D. Odell, M.D., Ph.D.
Professor and Chairman
Department of Medicine
University of Utah College of Medicine
Salt Lake City, Utah 84132

C. Alvin Paulsen, M.D.
Professor of Medicine
Department of Medicine
University of Washington School of Medicine
Seattle, Washington 98114

Allan Rosenfield, M.D.
Director, Center for Population and Family Health
Professor, Ob/Gyn and Public Health
Faculty of Medicine of Columbia University
New York, New York 10032

John J. Sciarra, M.D., Ph.D.
Professor and Chairman
Department of Obstetrics and Gynecology
North Western University and Medicine School
333 East Superior Street
Chicago, Illinois 60611

Sheldon Segal, Ph.D.
Director,
Population Division
Rockefeller Foundation
1133 Avenue of the Americas
New York, New York 10036

William, N. Spellacy, M.D.
Professor and Head
Department of Obstetrics and Gynecology
University of Illinois
College of Medicine
840 South Wood Street
Chicago, Illinois 60612

CONTRACEPTION is indexed in Bibliography of Reproduction, Biological Abstracts, Chemical Abstracts, Current Contents, Excerpta Medica, Index Medicus, and International Pharmaceutical Abstracts. Articles are abstracted monthly in Core Journals in Obstetrics and Gynecology.

Corresponding Editors for CONTRACEPTION

E. Coutinho, M.D.
Professor
Department of Biochemistry
and Obstetrics
University of Bahia
Salvador, Bahia, BRAZIL

P. G. Crosignani, M.D.
Professor
IV Department of Obstetrics
and Gynecology
University of Milano
Via M. Mellon, 52
20429 Milano, ITALY

Horatio B. Croxatto, M.D.
Consultorio de Planificacion
Familiar
Centro Nacional de la Familia
J.V. Lastarria 29, depto. 101
Santiago, CHILE

E. Diczfalusy, M.D.
Professor
Reprod. Endocrinology
Research Unit
Swedish Med. Research Council
Karolinska Sjukhuset
Stockholm 60, SWEDEN

Anibal Faundes, M.D.
Dept. of Obstetrics
and Gynecology
Universidade Estadual de Campinas
Campinas, S.P., BRAZIL

J. Ferin, M.D.
Professor
Physiology of Human Reprod.
Research Unit
University of Louvain Hosp.
Louvain, BELGIUM

I. Hallbrecht, M.D.
Professor
Department of Obstetrics
and Gynecology
Tel Aviv University Med. School
Tel Aviv, ISRAEL

J. Hammerstein, M.D.
Professor
Abt. Gynaek, Endokrinologie
Sterilitat and Familienplanung
Freie Universitat Berlin
Hindenburgdamm 30
1000 Berlin 45
FED. REP. GERMANY

A. A. Haspels, M.D., Prof.
Department of Obstetrics
and Gynecology
Academic Hospital
University of Utrecht
Catharjinesingel 101
Utrecht, NETHERLANDS

T. Luukkainen, M.D.
Steroid Research Laboratory
University of Helsinki
Department of Med. Chemistry
Siltavuorenpenger 10A
SF-00170 Helsinki 17,
FINLAND

Gregorio Perez-Palacios, M.D.
Professor and Chairman
Research Division and Dept. of
Reproductive Biology
Instituto Nacional de la Nutricion
Salvador Zubiran
Calle Vasco de Quiroga 15
Delegacion Tlalpan
14000-Mexico, D.F.

Badri N. Saxena, M.D.
Deputy Director General
Indian Council of
Medical Research
Ansari Nagar
New Delhi-110016, INDIA

R. P. Shearman, M.D.
Professor of Obstetrics
and Gynecology
The University of Sydney
Sydney 2006, N.S.W.
AUSTRALIA

M. Vessey, M.D., Professor of
Social and Community Medicine
Dept. of Community Medicine
& General Practice
University of Oxford
Gibson Laboratory Building
Radcliffe Infirmary
Oxford OX2 6HE
ENGLAND

GUIDE FOR AUTHORS

CONTRACEPTION invites concise reports of original research in the experimental and clinical aspects or all areas of contraception. The purpose of this journal is to provide a medium for the rapid communication of advances and new knowledge in this important field. The Editor anticipates receiving manuscripts from workers in the following areas of research: chemistry, biochemistry, physiology, endocrinology, biology, the medical sciences and demography. Publication of original papers within 90 days of manuscript receipt is planned. Authors will be advised of disposition of the manuscript within 30 days of receipt. Manuscripts should be sent to:

Daniel R. Mishell, Jr., M.D., Editor
Department of Obstetrics and Gynecology
University of Southern California School of Medicine
Women's Hospital, Room L1009
1240 North Mission Road
Los Angeles, California 90033

Authors outside the United States should address manuscripts to a corresponding editor in their own country. Authors in countries not represented by a corresponding editor should send their manuscripts directly to The Editor.

CONTRACEPTION

January 1985 Volume 31, Number 1

EDITORIAL: Contraceptive Futurology or 1984 in 1984
E. Diczfalusy..... 1

Report of a Joint National Institutes of Health (NIH)/Agency for International Development (AID)/Program for Applied Research in Fertility Regulation (PARFR) Workshop on Research and Development of Immunological Methods of Fertility Regulation..... 11

Deep Vein Thrombosis and the Oestrogen Content in Oral Contraceptives - An Epidemiological Analysis
A. Kierkegaard..... 29

Ethynyl-Estradiol (EE-2) Retained in Blood and Endometrium During and After Steroidal Contraception
I. Sojo-Aranda, A. Carrano-López, M. Navarrete-Arellano and V. Cortés-Gallegos..... 43

Long-Term Effects of Depo-Provera on Carbohydrate and Lipid Metabolism
D.F.M. Liew, C.S.A. Ng, Y.M. Yong and S.S. Ratnam..... 51

The Effect of Oral Medroxyprogesterone Acetate and Methyltestosterone on Sexual Functioning in a Male Contraceptive Trial
K. Doody and J. Bain..... 65

Phase I Comparative Clinical Trial with Subdermal Implants - Bioabsorbable Levonorgestrel or Norethisterone Pellet Fused with Cholesterol
U.M. Joshi, J.V. Joshi, U.M. Donde, G.M. Sankoli, K.D. Virkar and B.N. Saxena..... 71

The Inhibitory Effects of β-Momorcharin on Endometrial Cells in the Mouse
W.Y. Chan, P.P.L. Tam, K.C. So and H.W. Yeung..... 83

The Effects of the GnRH Agonist, [(imBzl)-D-His6, Pro9-NEt]-GnRH, on the Response to Stress in Rats
M.J. Gibson and D.S. Kohtz..... 91

Effect of Malvaviscus conzattii Flower Extract on Male Fertility
A. Pakrashi, S. Sanyal, R. Banerjee and N.R. Sen..... 101

CONTRACEPTION
February 1985 Volume 31, Number 2

Editorial Note..... 109

Peptide Contraception in Women. Inhibition of Ovulation by Chronic Intranasal LRH Agonist Therapy
C. Bergquist, S.J. Nillius and L. Wide..... 111

A New Superagonist of GnRH for Inhibition of Ovulation in Women
S.J. Nillius, J. Gudmundsson and C. Bergquist..... 119

Unaltered Lipoprotein and Carbohydrate Metabolism during Treatment with Contraceptive Subdermal Implants Containing ST-1435
V. Odlind, H. Lithell, I. Selinus and B. Vessby..... 123

Pharmacodynamics of a Contraceptive Vaginal Ring Releasing Norethindrone and Estradiol: Ovarian Function, Bleeding Control and Lipoprotein Patterns
A. Victor, H. Lithell, I. Selinus and B. Vessby..... 131

(-)-Gossypol: An Active Male Antifertility Agent
S.A. Matlin, R. Zhou, G. Bialy, R.P. Blye, R.H. Naqvi and M.C. Lindberg..... 141

Effect of Gossypol on Macromolecular Synthesis in Rat Testis. An *In Vitro* Study
P. Kainz, V. Nussbaumer, J. Frick and N. Kalla..... 151

Inhibition by (+) and (-) Isomers of Gossypol of Testosterone Release from Mouse Leydig Cells *In Vitro*
S.B. Sufi, A. Donaldson, S.L. Jeffcoate, S.A. Matlin and R.H. Zhou..... 159

Inhibition by Gossypol of Testosterone Production by Mouse Leydig Cells *In Vitro*
A. Donaldson, S.B. Sufi and S.L. Jeffcoate..... 165

Chloroquine and Premature Evacuation of Uterine Conceptus in Rats
R. Chatterjee (Basu), H.M. Ali, M.F. Darod and A. Chatterjee. 173

Competition between Seminal and Exogenous Proteinase Inhibitors for Sites on Murine Epididymal Sperm
D. Aarons, R. Robinson, R. Richardson and G.R. Poirier..... 177

In Vitro Amplification of Toxic Shock Syndrome Toxin-1 by Intravaginal Devices
P.M. Tierno, Jr. and B.A. Hanna..... 185

Absorption of an Oral Contraceptive Gestagen in Ulcerative Colitis before and after Proctocolectomy and Construction of a Continent Ileostomy
L.O. Nilsson, A. Victor, J.G. Kral, E.D.B. Johansson and N.G. Kock..... 195

Announcements..... 205

CONTRACEPTION

March 1985 Volume 31, Number 3

Preoperative Cervical Priming by Intracervical Application of a New Sulprostone Gel
W. Rath, N. Dennemark and H.-D. Gödicke..... 207

The Endocrinological Profile of Normal Menstrual Cycles in a Population of Chinese Women
B. Xiao, X. Zhang, W. Yan, L. Dong, M. Jia, S. Lin, D. Feng and E. Wu..... 217

Long-Term Experience with Norplant® Contraceptive Implants in Finland
P. Holma..... 231

The Use of Methyl Cyanoacrylate (MCA) for Female Sterilization
Study of the Program for Applied Research on Fertility Regulation..... 243

The Negative Effect of the IUCD on the Occurrence of Heteroploidy - Correlated Abnormalities in Spontaneous Abortions: An Update
L.H. Honoré..... 253

Anovulation, Inadequate Luteal Phase and Poor Sperm Penetration in Cervical Mucus during Prolonged Use of Norplant® Implants
V. Brache, A. Faúndes, E. Johansson and F. Alvarez..... 261

Interception II: Postcoital Low-Dose Estrogens and Norgestrel Combination in 633 Women
M.R. Van Santen and A.A. Haspels..... 275

Oral Contraceptives and Pituitary Response to GnRH: Comparative Study of Progestin-Related Effects
A. Römmler, S. Baumgarten, L. Moltz, U. Schwartz and J. Hammerstein..... 295

Contraception with Subdermal SI-1435 Capsules: Side Effects, Endocrine Profiles and Liver Function Related to Different Lengths of Capsules
H. Kurunmäki, J. Toivonen, P. Lähteenmäki and T. Luukkainen.. 305

Announcements..... 319

CONTRACEPTION

April 1985 Volume 31, Number 4

Clinical Chemistry in Women Treated with Six Levonorgestrel Covered Rods or with a Copper IUD
S. Diaz, H.B. Croxatto and M. Pavez..... 321

Immediate Postplacental IUD Insertion: The Expulsion Problem
M. Thiery, H.Van Kets and H. Van Der Pas..... 331

Contraception with Long-Acting Subdermal Implants. A Five-Year Clinical Trial with Silastic Covered Rod Implants Containing Levonorgestrel
The International Committee for Contraception Research of the Population Council..... 351

Return to Ovulation Following the Use of Long-Acting Injectable Contraceptives: A Comparative Study
J. Garza-Flores, S. Cardenas, V. Rodriguez, M.C. Cravioto, V. Diaz-Sanchez and G. Perez-Palacios..... 361

Oral Contraceptives, Lipids and Cardiovascular Disease
K. Fotherby..... 367

Serum Lipid and Lipoprotein Changes Induced by New Oral Contraceptives Containing Ethinylestradiol Plus Levonorgestrel or Desogestrel
U.J. Gaspard, J. Buret, D. Gillain, M.A. Romus and R. Lambotte..... 395

Transient Reduction in Serum HDL-Cholesterol Following Medroxyprogesterone Acetate and Testosterone Cypionate Administration to Healthy Men
K.E. Friedl, S.R. Plymate and C.A. Paulsen..... 409

Changes in the Biochemical Composition of Semen Following Danazol Plus Testosterone Enanthate Administration to the Langur Monkey
N.K. Lohiya, R.C. Sharma and O.P. Sharma..... 421

The Interaction between Sex Hormone Binding Globulin and Levonorgestrel Released from Vaginal Rings in Women
S.Z. Cekan, M. Jia, B.-M. Landgren and E. Diczfalusy..... 431

Letter to the Editor..... 441

Announcement..... 443

CONTRACEPTION

May 1985 Volume 31, Number 5

Suppression of Leukocytosis by the Intrauterine Delivery of High Doses of Indomethacin in the Rat
P.R. Hurst and P.V. Peplow..... 445

Pharmacokinetic and Pharmacodynamic Investigations with Monthly Injectable Contraceptive Preparations
A.-R. Aedo, B.-M. Landgren, E. Johannisson and E. Diczfalusy. 453

Post-Abortion Insertion of MLCu 250 and MLCu 375 - A Comparative Trial
L.S. Lim, T.G. McCarthy, Y.M. Yong and S.S. Ratnam..... 471

Inhibition of Luteal Phase Progesterone Levels in the Rhesus Monkey by Epostane
B.W. Snyder and H.P. Schane..... 479

The Zoapatle VI. Revisited
A.J. Gallegos..... 487

The Zoapatle VII. Antiimplantation Effect in the Rat of Zoapatle Aqueous Crude Extract (ZACE) from Montanoa tomentosa and Montanoa frutescens
N. Pedron, A.V. Estrada, H. Ponce-Monter, A. Valencia, A. Guzmán and A.J. Gallegos..... 499

The Zoapatle VIII. Ultrastructural Changes in Endometrium of Rats
A.G. Angulo, I.R. de Chavez, A.V. Estrada, N. Pedrón and A.J. Gallegos..... 509

The Zoapatle IX. In Vitro Effect of Montanoa tomentosa and Montanoa frutescens Upon Human Sperm and Red Cells
A. Wens, A. Valencia, N. Pedrón, H. Ponce-Monter, A. Guzmán and A.J. Gallegos..... 523

The Zoapatle X. The In Vitro Effect of Zoapatle Aqueous Crude Extract (ZACE) and Histamine Upon Rat and Guinea Pig Uterine Strips
H. Ponce-Monter, A.V. Estrada, N. Pedrón, A. Valencia and A.J. Gallegos..... 533

The Zoapatle XI. Effects Elicited by Montanoa tomentosa and Montanoa frutescens on Rat Uterine Strips
M. Perusquía, E. Sánchez, H. Ponce-Monter, A.V. Estrada, N. Pedrón, A. Valencia, A. Guzmán and A.J. Gallegos..... 543

Letter to the Editor..... 553

CONTRACEPTION

June 1985 Volume 31, Number 6

Relative Potency of Progestins Used in Oral Contraceptives
L.J. Dorflinger..... 557

Vaginal Administration of a Combined Oral Contraceptive Containing Norethisterone Acetate
A.R. Souka, M. Kamel, M.A. Einen, F. Saleh and H. Sallam..... 571

A Randomized Cross-Over Comparison of Two Low-Dose Oral Contraceptives upon Hormonal and Metabolic Parameters:
I. Effects Upon Sexual Hormone Levels
H. Kuhl, G. Gahn, G. Romberg, W. Marz and H.-D. Taubert..... 583

Group B-Beta Haemolytic Streptococcal Colonization in Women Using Intrauterine Contraceptive Devices
O.A. Farrag, A.A. Gawad and S. Antar..... 595

IUD Insertion Following Induced Abortion
L. Querido, E. Ketting and A.A. Haspels..... 603

Norethisterone Concentration in Breast Milk and Infant and Maternal Plasma During Ethynodiol Diacetate Administration
I.D. Cooke, D.J. Back and N.E. Shroff..... 611

Interaction of Anticonvulsants and Oral Contraceptives in Epileptic Adolescents
M.P. Diamond, J.W. Greene, J.M. Thompson, J.E. VanHooydonk and A.C. Wentz..... 623

Effect of Long-Term Hormonal Contraception on Plasma Lipids
J.P. Deslypere, M. Thiery and A. Vermeulen..... 633

Plasma Levonorgestrel and Progesterone Levels in Women Treated With Silastic Covered Rods Containing Levonorgestrel
H.B. Croxatto, S. Diaz, A. Brandeis, M. Pavez and E.D.B. Johansson. 643

Announcement..... 655

Author Index to Volume 31..... 657

Subject Index to Volume 31..... 659